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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,891	08/02/2001	Michael Kwan	A4231/T34410	9729

32588 7590 09/06/2002

APPLIED MATERIALS, INC.
2881 SCOTT BLVD. M/S 2061
SANTA CLARA, CA 95050

EXAMINER

KACKAR, RAM N

ART UNIT	PAPER NUMBER
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1763

10

DATE MAILED: 09/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/920,891

Applicant(s)

KWAN ET AL.

Examiner

Ram N Kackar

Art Unit

1763

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 30 August 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 17-22

Claim(s) withdrawn from consideration: _____

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☒ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). 8.
10. ☐ Other: _____

GREGORY MILLS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

Art Unit: 1763

Applicant's argument

1 Combination of Hong and Papasouliotis is improper because Hong is directed to PECVD and Papasouliotis is directed to HD CVD and Papasouliotis suggests that there may be no expectation of success in using dep/etch/dep as taught by Hong.

2 Combination of Becker with Hong and Papasouliotis is improper because language in office action does not agree with the teaching of Becker.

Examiners response:

1 Papasouliotis does not teach away either from Hong or the application and suggests improvement to the simple dep/etch/dep process of Hong in the same way as done by the applicant. Both recognized the dep/etch/dep process to be a prior art and having limitations in filling gap of higher aspect ratios.

2 It would be obvious to lower the temperature to ambient after deposition step and before etch step because after deposition, gases and other process variables have to be changed, in preparation for etch step and keeping high temperature while process conditions are settling could be damaging to the substrate. Examiners reference of Becker (US 6015760 Col 2 line 36-44 further referring to Lee M Loewenstein) was only to provide evidence that the etch rate depended on temperature. Office action did not rely on the relationship of selectivity of etch to temperature.